

Facility Safety Plan

Issued (or Revised) date -

Expires date

*Title of Safety Plan*

Preface

*Include this paragraph:*

Laboratory management requires that the controls specified in this facility safety plan (FSP) be applied to efficiently and safely perform operations within this facility.

This FSP was prepared by (signature):

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Facility Manager

This FSP was reviewed by (signature):

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Hazards Control  
ES&H Team Leader

This FSP was approved by (signature):

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Facility Associate Director

Contents [*Example*]

## Preface

## 1.0 Introduction

Purpose

Applicability

Changes

Review

Administrative Control of the Facility

## 2.0 Responsibilities and Authorities (add as applicable)

General

Associate Director

Deputy Associate Directors

Assurance Manager

Division Leaders

Facility Manager

Facility Point of Contact.

Building Coordinator/Facility Associate

Area Supervisors

Responsible Individuals

Employees and Contract Personnel

ES&amp;H Team

Environmental Protection Department

Health Services Department

WAA Coordinator

WAA Operator

Materials Management

Plant Engineering

3.0 General Building Policies and Control (*as applicable*)Technical Safety Requirements (TSRs)/Operational Safety  
Requirements (OSRs)

Use and processing of IWS screening documents.

Other ES&amp;H Evaluations

Personnel Protective Equipment

Material Handling

Roof Access Controls

Working Alone

Egress

Eating and Drinking in Laboratories and Work Areas

Fire Safety

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Laboratory/Shop/Experiment Close-out Plan

Control of Documents

#### 4.0 Covered Operations, Hazards Analyses, and Controls

#### 5.0 Training Requirements

Responsibility for Training

Training Records

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Required Reading

#### 6.0 Maintenance, Inspection, and Quality Assurance of Safety Systems, Environmental Systems, and Equipment

#### 7.0 Emergency Response Plans and Procedures

Injury, Illness, or Uncontrolled Hazards Condition

Evacuation Alarm

Fire Fighting

Hazardous Materials or Waste Releases (including spill contingencies)

Radioactive Materials and Waste Releases

Emergency Controls

Notification of Accidents or Incidents, including Occurrence Reporting

Notification of Unsafe Conditions

#### 8.0 References

#### Appendices

A. Building Floor Plans.

B. List of Organizations Operating in the Facility and Area Supervisors.

C. Emergency Callout List.

D. Emergency Response Plans and Procedures.

- E. Self-help Plan [See "Emergency Management" ([H&SM C3](#)) in Volume II of the *ES&H Manual*].
- F. Safety Plan Review Form.
- G. Controlled and Uncontrolled Distribution Lists.
- H. [Other].

## Instructions for Each FSP Section

### 1.0 Introduction

*Use the following paragraph:*

This FSP describes the safety parameters for the operations in building \_\_\_\_ (the facility) [or *building complex* \_\_\_\_ ], the responsibilities and authorities of building personnel for ensuring safe operations, and operational hazards and environmental concerns and their controls. In addition, this FSP prescribes facility-specific training requirements, emergency controls, maintenance, and quality assurance requirements for ES&H-related building systems.

*Provide a brief description of the nature of the operations and a complete list of all the facilities covered by this FSP.*

### 2.0 Responsibilities and Authorities

#### 2.1 General

*Identify the safety management chain for the facility.*

#### 2.2 (Continuing)

*The following sections should clearly identify the positions and support groups associated with the facility and their ES&H responsibilities and authorities when either their title or their responsibilities and authorities deviate from those described in the ES&H Manual (note the positions listed in the [FSP contents example](#)). It is suitable to reference this information when it is contained in other management documents.*

### 3.0 General Building Policies and Controls

#### 3.1 Technical Safety Requirements and Operational Safety Requirements

*Technical Safety Requirement (TSRs) and Operational Safety Requirements (OSRs) (from a DOE-approved safety analysis) are safety limits on the conditions of operations and administrative and/or management controls required to ensure safe operation of a facility. If applicable, this section shall summarize the safety limits and limiting conditions of operations for*

the facility (see "Technical Safety Requirements" ([H&SM S2.22](#)) in Volume V of the ES&H Manual). If no TSRs and OSRs are applicable to this facility, this section should state that fact.

### 3.2 (Continuing)

*This section (see "Contents") should provide or reference general ES&H policies and controls that facility management has established for the facility (e.g., Integration Worksheet review and authorization of activities; room or area access controls; roof access controls; rules for working alone and after normal working hours, eating and drinking in work areas, housekeeping, seismic anchoring of equipment; and requirements for safety evaluations of specific experiments).*

## 4.0 Operations, Hazards Analyses, and Controls

*The following format provides for listing all ES&H hazards in a single section and for integrating their controls into the same section. Existing FSP formats (with separate sections for health and safety hazards and controls, and for environmental hazards and controls), may be used indefinitely for future revisions (i.e., until the Program and the ES&H Team agree that a complete rewrite is warranted).*

*Operations covered by this FSP, including their hazards and required controls, are listed below.*

### 4.1 Operations, Hazards, and Controls

*The hazardous operations and their necessary controls that required the issuance of this FSP are listed below.*

*Using the following instructions, identify the classes of operations and materials (including their limits), the hazards associated with those classes, and the applicable controls.*

#### Operations

*Describe operations and activities for hazards in the facility and the associated controls.*

#### Hazards

*State the potential consequence(s) of the particular operation identified above. Reference to general hazards already described in the ES&H Manual may be adequate. The question to be answered in this section is "If I were to conduct operations without safety controls, what would be the potential consequences?" For example, if an electrical shock hazard exists from a 30-kV power supply, the analysis shall state whether a potential shock may have fatal, serious, or minor consequences. Similarly, the consequences from a high-pressure hazard may result in a fatality*

*or can cause severe injury to operating personnel if the pressure system or line were to rupture. If an explosion is the potential hazard, would it be completely contained by a vessel; or could it destroy the vessel or part of the room and injure operating personnel?*

*If a safety analysis document or safety analysis report has been written for the facility, it will describe the hazards (including the consequences outside the facility) and specify bounding accident scenarios. This information should be supplemented by the type of hazard analysis information described in "Managing ES&H for LLNL Work" (H&SM C2), and "Safety Analysis Program" (H&SM S6.06) in Volume I of the ES&H Manual, and any new hazard analysis needed. Be specific when quantifying these items.*

*If monitoring of exposure levels is included in the controls, the Occupational Exposure Limits, Permissible Exposure Limits, Threshold Limit Values, etc.) should be discussed in this section. Contact your ES&H Team for assistance in stating the potential consequences of each identified hazard.*

## Controls

*State the controls for each of the hazards identified above. Reference to general controls already described in the ES&H Manual may be adequate. Each control should be specific and contain both action and reaction (e.g., if you say, "Survey the area upon completion of the job," state what to do if contamination is found).*

*State the limitations of voltage, quantity, pressure, temperature, and concentrations that are vital to the control of any hazards involved. Describe the necessary controls for shipping, receiving, and storing hazardous material and specify any protective clothing to be worn. If an Engineering Safety Note has been prepared, include a summary of the design parameters that established the system's limitations; be sure to list the safety note in the reference section.*

*State that the health and safety technician should be notified if there are significant changes to the location of hazardous material so that "run cards" used by the Fire Department when responding to emergency calls can be updated.*

*Operations with hazardous chemicals are regulated by the OSHA Health Hazard Communication Standard. Instructions for implementing this standard and the controls necessary for the safe handling of hazardous chemicals are given in "Chemicals" (H&SM C21) in Volume II of the ES&H Manual and its supplements. FSPs must provide specific controls and limits that ensure compliance with this standard, including regulatory requirements (Occupational Safety and Health Administration, DOE, and the Environmental Protection Agency). Contact your ES&H Team for assistance with developing adequate controls for each identified hazard.*

*Reference the training listed in Section 5 as one of the administrative controls for the facility.*

## Special Considerations

*Identify any operation or material that requires special consideration and that is within the scope of this FSP. These operations and materials require prior review of this plan by facility management and the ES&H Team Leader before the operation begins or before materials are brought into the facility. Include the reason for this requirement.*

## 5.0 Training Requirements

*Specify who is responsible for ensuring that employees complete facility-required training and that training records are maintained. (General ES&H training is covered by the Training Program Manual and managed through the LTRAIN system). If facility-specific training and recordkeeping requirements are provided in a directorate training program plan, reference the document. Specify any facility orientation and/or training for newly assigned employees (e.g., including janitors) and any special requirements for summer students, visitors, and supplemental labor.*

*Specify the conditions, if any, under which untrained personnel can participate in hazardous facility operations. State how personnel working in the facility will be informed about the FSP rules and requirements governing operations.*

*In the section on required reading, identify FSPs and OSPs, material safety data sheets (MSDSs), emergency plans, chapters or sections of the ES&H Manual, and other documents that specifically pertain to the operation.*

## 6.0 Maintenance, Inspection, and Quality Assurance of Safety Systems, Environmental Systems, and Equipment

*The FSP shall identify and establish maintenance, inspection, and quality assurance (QA) requirements for systems or equipment important to safety and environmental protection (i.e., safety systems). Additional guidance is given in [Section 4 of the LLNL Maintenance Program Guidance Manual](#).*

*Specify the required preventive maintenance and who in the facility is responsible for ensuring that maintenance is performed. Because safety systems may support programmatic operations, address the controls that will be used to ensure that programmatic operations are shut down (if necessary). Maintenance requirements may be provided in an appendix to the FSP. If a facility-specific maintenance manual exists or maintenance is performed by Plant Engineering, refer to the appropriate sections in the applicable manual.*

*Specify the QA requirements for the safety systems (i.e., state the inspection, testing, and surveillance methods) used to ensure the quality of facility systems important to safety and*



*environmental protection. Specify the corrective action system to be used in the facility for identifying and repairing defective components, restoring systems to operation, and tracking deficiencies in safety systems. Identify the individual (by title) in the facility responsible for the QA of safety systems. Reference applicable sections of the QA plan and procedures if they exist. Review the surveillance requirements in applicable TSRs (listed in the relevant safety analysis report or document) and ensure that these requirements are included in this section.*

## 7.0 Emergency Response Plan and Procedures

*Identify possible emergencies that are unique to this facility, and include in the FSP a plan to respond to these emergencies.*

## 8.0 References

*List any pertinent references (e.g., hazards analyses, safety analysis documents, and Engineering Safety Notes).*

### Appendices

*Appendices may be included as part of the FSP to provide supplementary information. Changes to appendices may be made as needed (e.g., to update the emergency callout list) without requiring a separate authorizing signature. The examples below may be cited by reference.*

- A. Building floor plans*
- B. List of organizations operating in the facility and area supervisors*
- C. Emergency callout list*
- D. Emergency response plans and procedures*
- E. Self-help plan (see H&SM C3)*
- F. Spill contingency plan*
- G. Required reading list*
- H. Safety Plan Review Form*
- I. Controlled and Uncontrolled Distribution Lists*
- J. Other*